Application No. 10/574,615

Docket No.: 1691-0217PUS1

AMENDMENTS TO THE CLAIMS

- 1. (Cancelled).
- 2. (Previously Presented) The method of treating tear abnormality of claim 12, wherein the treatment of the tear abnormality is achieved by an improvement in the stability of a tear layer and/or an improvement in the retention of tear on the keratoconjunctiva.
- 3. (Previously Presented) The method of treating tear abnormality of claim 2, wherein the improvement in the stability of the tear layer is achieved by inhibition of evaporation of tear.
- 4. (Previously Presented) The method of treating tear abnormality of claim 2, wherein the improvement in the stability of the tear layer is achieved by an improvement in tear layer breakup time.
- 5. (Previously Presented) The method of treating tear abnormality of claim 2, wherein the improvement in the retention of tear is achieved by retention of keratoconjunctiva epithelium cells in a normal state and/or restoration of the keratoconjunctiva epithelium cells to the normal state.
- 6. (Previously Presented) The method of treating tear abnormality of claim 2, wherein the improvement in the retention of tear is achieved by retention of the microvilli/microfolds of keratoconjunctiva epithelium cells in a normal state and/or restoration of the microvilli/microfolds of the keratoconjunctiva epithelium cells to the normal state.
- 7. (Previously Presented) The method of treating tear abnormality of claim 12, wherein the tear abnormality is tear abnormality without impairments on the keratoconjunctiva.

Application No. 10/574,615

Docket No.: 1691-0217PUS1

8. (Previously Presented) The method of treating tear abnormality of claim 12, wherein the treatment of the tear abnormality is inhibition of the occurrences of diseases caused by the tear abnormality.

- 9. (Previously Presented) The method of treating tear abnormality of claim 8, wherein the treatment of the tear abnormality is inhibition of the occurrences of diseases caused by the tear abnormality without impairments on the keratoconjunctiva.
- 10. (Previously Presented) The method of treating tear abnormality of claim 12, wherein the concentration of 3-hydroxybutyric acid and/or salts thereof is 0.8 to 800 mmol/l.
- 11. (Previously Presented) The method of treating tear abnormality of claim 12, wherein the concentration of 3-hydroxybutyric acid and/or salts thereof is 10 to 150 mmol/l.
- 12. (Previously Presented) A method for treating tear abnormality in a patient suffering from a tear abnormality, which comprises:

administering to a patient having at least one tear abnormality selected from the group consisting of hypolacrimation, alacrima, xerophthalmia, Sjogren's syndrome, Stevens-Johnson syndrome, ocular pemphigus, marginal blepharitis, dysfunctions of lidaperture and sensory nerves, dry eye associated with allergic conjunctivitis and viral conjunctivitis, an opthalmological composition comprising 3-hydroxybutyric acid and/or salts thereof as an active ingredient in an amount effective in treating the tear abnormality.

13. – 14. (Cancelled).

15. (Previously Presented) A method for treating tear abnormality of claim 12, wherein said opthalmological composition is administered as one to three eye drops, one to twenty times per day.

Application No. 10/574,615

Docket No.: 1691-0217PUS1

16. (Previously Presented) A method for treating tear abnormality of claim 15, wherein said eye drops are administered one to ten times per day.

17. (New) A method for treating tear abnormality in a patient suffering from a tear abnormality, which method comprises:

administering to a patient having at least one tear abnormality selected from the group consisting of hypolacrimation, alacrima, xerophthalmia, Sjogren's syndrome, Stevens-Johnson syndrome, ocular pemphigus, marginal blepharitis, dysfunctions of lidaperture and sensory nerves, dry eye associated with allergic conjunctivitis and viral conjunctivitis, an opthalmological composition comprising (i.) 0.8 to 800 mmol/l 3-hydroxybutyric acid and/or salts thereof as an active ingredient, (ii.) a buffer in a concentration ranging from 0.001 to 5 w/v%, and (iii.) a viscosity inducing agent in a concentration ranging from 0.1 to 5 w/v% in an amount effective for treating the tear abnormality, wherein said opthalmological composition is administered as one to three eye drops, one to twenty time per day.